

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Juin-Jet Hwang et al.

Art Unit: 3737

Serial No.: 09/481,814

Reissue of Patent No.: 5,706,819

Examiner: John F Ramirez

Patent Granted: January 13, 1998

Reissue Appl. Filed: 1/11/2000

For : ULTRASONIC DIAGNOSTIC IMAGING WITH
HARMONIC CONTRAST AGENTS

Commissioner for Patents
P.O. Box 1450
Arlington, VA 22313-1450

SUPPLEMENTAL REISSUE DECLARATION

Sir:

Juin-Jet Hwang and David Hope Simpson ("Applicants"), being all of the inventors in the above-captioned patent, hereby declare as follows:

1. Applicants hereby state that Applicants have reviewed and understand the contents of the specification, including the claims, of this reissue application and each of us believes that he is an original, first and joint inventor of the subject matter which is claimed and for which a reissue patent is sought, which is based on the disclosure of United States Letters Patent Number 5,706,819 for "Ultrasonic Diagnostic Imaging with Harmonic Contrast Agents" granted on

January 13, 1998, and Applicants hereby solicit a reissue patent based on the same disclosure.

2. Applicants acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

3. Applicants verily believe that the above-referenced U.S. Patent No. 5,706,819 is wholly or partly inoperative or invalid by reason of the patentees claiming less than they had a right to claim in the patent. The insufficiency of the claims of the original patent are specified below.
Applicants are seeking to correct this error by this broadening reissue application.

4. The errors, which render U.S. Patent No. 5,706,819 wholly or partly inoperative by reason of the patentees claiming less than they had a right to claim in the patent, result from the failure to specifically claim ultrasonic methods which use pulse sequences of three or more pulses, and the failure to claim the benefit of the priority provisional application in the specification. Issued patent Claims 1-4 recite the steps of:

"transmitting a first ultrasonic pulse" and
"transmitting a second ultrasonic pulse"

However the patent claims fail to claim a method of ultrasonically detecting a nonlinear response by transmitting at least three ultrasonic pulses. It is this error which our reissue application corrects. Specifically new Claims 5, 14, 17, and 20, the new independent claims, each recite in part:

"transmitting at least three ultrasonic pulses..." or
"transmitting a first ultrasonic pulse..." "transmitting a second ultrasonic pulse..." "transmitting a third ultrasonic pulse..."

New dependent Claims 6-13, 15-16, 18-19 and 21-25 inherit one of these recitations. It is thus seen that all of new Claims 5-25 correct the error of original Claims 1-4 in failing to claim a method of ultrasonically detecting a nonlinear response by transmitting at least three ultrasonic pulses. Transmitting sequences of three or more pulses is described in columns 5 and 6 of the issued patent. Such error arose through inadvertence, accident or mistake, and without any deceptive intention on the part of the Applicants.

5. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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